
9. Mutual Friends

Program Name: Mutual.java

Input File: mutual.dat

You keep seeing this guy around in school. You remember his name, but you have no idea how you know him. You hope that maybe if you see who your mutual acquaintances are, you can figure it out. To solve this problem in true computer science fashion, you write a program to use Facebook's API, download both of your lists of friends, and check to see what friends you have in common.

Input

The first line of input contains T, the number of test cases that follow.

The first line of each test case contains one integer N, the number of friends on your friends list. The next N lines each contain the name of one of your friends. The line after that contains a single integer M, the number of that person's friends. The next M lines each contain the name of one of his friends.

Output

For each test case, print the case number on its own line, and then all of the friends you have in common (in alphabetical order), each on their own line.

Constraints

1 ≤ T ≤ 10

1 ≤ N, M ≤ 15

Example Input File

```
3
3
Tyler
Alex
Maria
3
Zach
Maria
Tyler
2
Marge
Danny
1
Michael
1
Bill
1
Bill
```

Example Output to Screen

```
Case 1:
Maria
Tyler
Case 2:
Case 3:
Bill
```

Explanation of Output

In the first case, you are both friends with Maria and Tyler. Maybe you met because Maria is in chess club and you went to that one meeting your freshman year. Or maybe you met him at one of Tyler's crazy trombone parties.

In the second case, you have no mutual friends, so you have no idea how you know this guy. Maybe he just looks like someone else you know? In case 3, you decide you really should get more friends on Facebook.